

citizens who received doctorates in the final years of the century.

NON-SCIENCE AND ENGINEERING

Education

The field of education produced more doctorates every year from 1962 to 1999 than any other major field. Education's share of doctorates was nearly 16 percent by 1995–99 but was greatest in the 1970s and 1980s, when it ranged from 20 to 23 percent. The number of awards remained level from the late 1980s through the end of the century.

Health Sciences

Doctorates awarded in health sciences, the smallest of the non-S&E major fields, grew from 100 in 1920–24 to 6,990 in 1995–99, and the field's share of all doctorates increased from 2 to 3 percent over that period.

Humanities

Humanities was the second largest of the major fields for production of doctorates in 1920–24 and was the fourth largest in 1995–99.

Professional and Other Fields

The number of doctorates awarded in professional and other fields grew slowly but continuously through the mid-1960s and then more rapidly through the early 1970s.⁵ Doctoral awards in these fields had another period of rapid growth in the 1980s, then began to stabilize in the 1990s.

DEMOGRAPHIC CHARACTERISTICS OF PH.D.S

Overall growth of the U.S. population naturally contributed to increases in doctorates earned over the course of the century. The demographic composition of doctorate recipients changed substantially as well. Long-term trends in the demographic characteristics of doctorate recipients—sex, citizenship status, and race/ethnicity—are examined here.⁶

⁵ This major field includes doctorates in business management and administrative services, communications, and other professional fields, such as architecture and environmental design, library science, public administration, and social work.

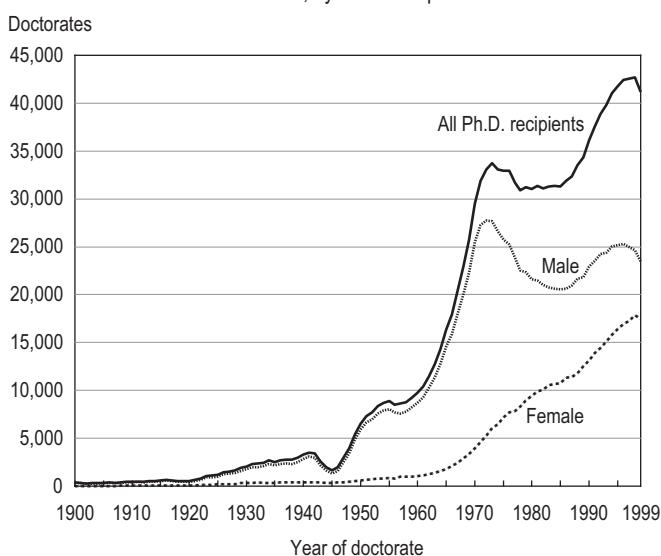
⁶ A listing of the country of citizenship of non-U.S. citizen Ph.D.s by visa status can be found with the supplemental tables for this report on the NSF website at <http://www.nsf.gov/statistics/nsf06319/>.

SEX

Throughout the 20th century men earned the majority of doctorates and accounted for much of the substantial increase in total doctorate production (figure 3-2). For the period 1920–99 men received 73 percent of all doctorates awarded and women received 27 percent. Most of the growth in doctorate production among men in the late 1980s and the 1990s resulted from the large increases in the numbers of foreign men seeking graduate education in the United States, not from greater numbers of U.S. men receiving doctorates. The percentage of male doctorate recipients who were foreign nationals rose from 22 percent in 1980–84 to 38 percent in 1990–94.

Changes in public policies after World War II created a more favorable climate for growth in doctorate production, noted first among men, than existed in the prewar years. In the 1950s the number of men earning doctorates surged (figure 3-2). This trend can be largely attributed to the G.I. Bill, enacted in 1944, which afforded returning World War II veterans the opportunity and financial support to begin or continue their education. A second period of substantial growth in doctorate production by men occurred in the post-*Sputnik* era, from the 1960s to the early 1970s. Among the contributing factors were new or expanded federal programs for graduate fellowships and traineeships as well as student deferments during part of the Vietnam War. In the 1970s concerns about a possible oversupply of Ph.D.s led to modification or curtailment of some federal and private programs that supported graduate students, and the

FIGURE 3-2. Doctorates awarded, by sex of recipient: 1900–99



SOURCES: NSF/NIH/USED/NEH/USDA/NASA, Survey of Earned Doctorates and Doctorate Records File (1920–99); U.S. Office of Education annual and biennial reports (1900–19).